

IN THE CLAIMS

1-7 (canceled)

8. (new) A method comprising subjecting a TiO_2 residue from a sulfate process to heat treatment and, without being mixed further with other substances, performing a metallurgical process or preparing a refractory material with the heat treated TiO_2 residue.
9. (new) The method according to claim 8, wherein the TiO_2 residues are subjected to heat treatment at from 100 to 1300°C.
10. (new) The method according to claim 8, wherein the TiO_2 residues are in powder form or in the form of molded bodies.
11. (new) The method according to claim 9, wherein the TiO_2 residues are in powder form or in the form of molded bodies.
12. (new) The method of claim 8, wherein the TiO_2 residue comprises from 35 to 70 wt. % TiO_2 ; from 5 to 40 wt.% SiO_2 ; from 2 to 15 wt.% of iron compounds; from 1 to 15 wt.% MgO ; and from 0.5 to 15 wt.% CaO .
13. (new) The method of claim 8, wherein TiO_2 residue comprises calculated as oxides from 20 to 80 wt.% TiO_2 ; from 2 to 30 wt.% SiO_2 ; from 0 to 15 wt.% Al_2O_3 ; from 0 to 15 wt. % Fe_2O_3 ; from 1 to 15 wt.% MgO ; from 0 to 15 wt.% CaO .
14. (new) The method according to claim 8, wherein the dried TiO_2 residues are injected into a metallurgical furnace.
15. (new) The method according to claim 8, wherein the dried TiO_2 residues are used in a tap hole mass.
16. (new) The method of claim 9, wherein the TiO_2 residue comprises from 35 to 70 wt. % TiO_2 ; from 5 to 40 wt.% SiO_2 ; from 2 to 15 wt.% of iron compounds; from 1 to 15 wt.% MgO ; and from 0.5 to 15 wt.% CaO .
17. (new) The method of claim 10, wherein the TiO_2 residue comprises from 35 to 70 wt. % TiO_2 ; from 5 to 40 wt.% SiO_2 ; from 2 to 15 wt.% of iron compounds; from 1 to 15 wt.% MgO ; and from 0.5 to 15 wt.% CaO .

18. (new) The method of claim 11, wherein the TiO_2 residue comprises from 35 to 70 wt. % TiO_2 ; from 5 to 40 wt. % SiO_2 ; from 2 to 15 wt. % of iron compounds; from 1 to 15 wt. % MgO ; and from 0.5 to 15 wt. % CaO .
19. (new) The method of claim 9, wherein TiO_2 residue comprises, calculated as oxides, from 20 to 80 wt. % TiO_2 ; from 2 to 30 wt. % SiO_2 ; from 0 to 15 wt. % Al_2O_3 ; from 0 to 15 wt. % Fe_2O_3 ; from 1 to 15 wt. % MgO ; from 0 to 15 wt. % CaO .
20. (new) The method of claim 10, wherein TiO_2 residue comprises, calculated as oxides, from 20 to 80 wt. % TiO_2 ; from 2 to 30 wt. % SiO_2 ; from 0 to 15 wt. % Al_2O_3 ; from 0 to 15 wt. % Fe_2O_3 ; from 1 to 15 wt. % MgO ; from 0 to 15 wt. % CaO .
21. (new) The method of claim 11, wherein TiO_2 residue comprises, calculated as oxides, from 20 to 80 wt. % TiO_2 ; from 2 to 30 wt. % SiO_2 ; from 0 to 15 wt. % Al_2O_3 ; from 0 to 15 wt. % Fe_2O_3 ; from 1 to 15 wt. % MgO ; from 0 to 15 wt. % CaO .
22. (new) The method of claim 12, wherein TiO_2 residue comprises, calculated as oxides, from 20 to 80 wt. % TiO_2 ; from 2 to 30 wt. % SiO_2 ; from 0 to 15 wt. % Al_2O_3 ; from 0 to 15 wt. % Fe_2O_3 ; from 1 to 15 wt. % MgO ; from 0 to 15 wt. % CaO .
23. (new) The method according to claim 9, wherein the dried TiO_2 residues are injected into a metallurgical furnace.
24. (new) The method according to claim 10, wherein the dried TiO_2 residues are injected into a metallurgical furnace.
25. (new) The method according to claim 11, wherein the dried TiO_2 residues are injected into a metallurgical furnace.
26. (new) The method according to claim 12, wherein the dried TiO_2 residues are injected into a metallurgical furnace.
27. (new) The method according to claim 13, wherein the dried TiO_2 residues are injected into a metallurgical furnace.
28. (new) The method according to claim 14, wherein the dried TiO_2 residues are injected into a metallurgical furnace.
29. (new) The method according to claim 15, wherein the dried TiO_2 residues are injected into a metallurgical furnace.
30. (new) The method of claim 8, wherein a metallurgical process is performed.

31. (new) The method of claim 8, wherein a refractory material is prepared.